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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/167,351 10/07/98 HAAF

K 514413-3563

020999 HM12/0913  
FROMMER LAWRENCE & HAUG  
745 FIFTH AVENUE- 10TH FL.  
NEW YORK NY 10151

EXAMINER

BRADSHAW, T

ART UNIT

PAPER NUMBER

1627  
DATE MAILED:

09/13/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

## Office Action Summary

Application No.

09/167,351

Applicant(s)

HAAF ET AL.

Examiner

Thomas W Prasthofer

Art Unit

1627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 2-9 and 16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-9 and 16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **Detailed Action**

#### **Change of Examiner**

The examiner of this application has changed from Grace Hsu Ph.D., J.D. to Thomas Prasthofer, Ph.D.

#### **Status of the Application**

Receipt is acknowledged of a response to an office action in Paper No. 11 on June 8, 2001.

#### **Status of the Claims**

Claims 2-9 and 16 are pending in the present application.

#### **Withdrawn Rejections-35 U.S.C. 103**

1. The rejection of claims 1-9 under 35 USC 103(a) maintained in the office action mailed 12/05/00 (Paper No. 9) is withdrawn in response to applicant's arguments.

#### **Maintained Rejections -35 U.S.C. 112, first paragraph**

2. The rejection of claims 2-9 and 16 under 35 U.S.C. 112, first paragraph, in paragraph 15 of the office action mailed 12/05/00 (Paper No. 9) is maintained for reasons of record. Applicant's response has been carefully considered but is found to be not persuasive. While applicant provides a number of examples of linkers, for example, the specification does not provide one of ordinary skill the guidance required to practice the invention with any linker. While the skilled chemist may know of numerous possible linkers and S<sup>1</sup> functional groups, for

example, the scope of the claims is much broader claiming any organic linker (defined only by function) and functional groups "suitable for palladium-catalyzed substitutions analogous to the Heck reaction." The rejection is maintained.

**Maintained Rejections -35 U.S.C. 112, second paragraph**

3. The rejections of claims 2-9 and 16 under 35 U.S.C. 112, second paragraph in paragraphs 11 and 12 of the office action mailed 12/05/00 (Paper No. 9) are maintained for reasons of record. Responses to applicant's arguments appear in the following paragraphs.

4. Claims 2-9 and 16 stand rejected under 35 U.S.C. 112, second paragraph for missing essential structural-functional relationships required to the practice of the invention as claimed. Applicant argues that the claims include all of the necessary steps for one skilled in the art to practice the invention as claimed.

Applicant's argument has been carefully considered and found not to be persuasive. On page 3 of applicant's response, applicant argues that a definition of the term "linker" group is provided in the specification and applicant makes an analogy to a substituted phenyl group. Applicant asserts that "one skilled in the art would recognize the types of compounds that are defined by the generic structures in the claims" when read in light of the specification. This assertion appears to be based upon the argument that the generic formulae can be interpreted in such a way that the metes and bounds of the claimed compounds would be recognized by one of skill in the art. Applicant asserts that the selection of linkers, functional groups, and reaction types are part of generally known chemical techniques known by a skilled chemist.

The arguments are not found persuasive because they do not adequately address the rejection which is based on missing structural-functional relationships. Parts of the claimed method involve molecules and structures that are defined only in functional terms but must meet structural requirements in practice. Applicant argues that a skilled chemist would know which molecules (reagents) to use and, presumable, the connectivity(ies) required to practice the claimed invention. While this may be the case for some linkers, for example, it would not be the case for linkers commensurate in scope with the claims. The rejection is maintained.

5. Claims 2-9 and 16 stand rejected under 35 U.S.C. 112, second paragraph for missing essential structural-functional relationships required to the practice of the invention as claimed. Applicant argues that the claims include all of the necessary steps for one skilled in the art to practice the invention as claimed.

Applicant's argument has been carefully considered and found not to be persuasive. Applicant argues, for example, that a "preferred definition" for  $S^1$  is mentioned in the specification and so the term is used in a way that is analogous to "esterification." This is not persuasive because the term is used in the claims together with "suitable for palladium-catalyzed substitutions analogous to the Heck reaction." Accordingly, the more appropriate analogy to "esterification" might be "suitable for a reaction that is analogous to esterification" which is not definite.

Applicant argues that the terms "resin polymer, linker, Z,  $E^1$ , and  $S^1$ " are broad but not indefinite. The term "linker," for example is defined only in functional terms and is indefinite. Applicant explains that  $E^1$  is "an independent selection made by one skilled in practicing the invention." The term, however, is defined as "a radical which is suitable for preparing  $R^1$  in compound (I)," which is indefinite because the metes and bounds of the claimed invention become dependent upon the judgment of one using the invention who determines what is "suitable." The rejection is maintained.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Thomas Prasthofer** at telephone number **(703) 308-4548**. The examiner can normally be reached on Monday, Tuesday, Friday, and Saturday 8:00-6:30.

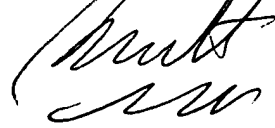
8. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jyothsna Venkat can be reached on (703) 308-2439. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-2742.

9. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist at (703) 308-1235.

Thomas Prasthofer, Ph.D.

September 10, 2001

**BENNETT CELSA**  
**PRIMARY EXAMINER**



acting spe